Solutions for Demanding Applications

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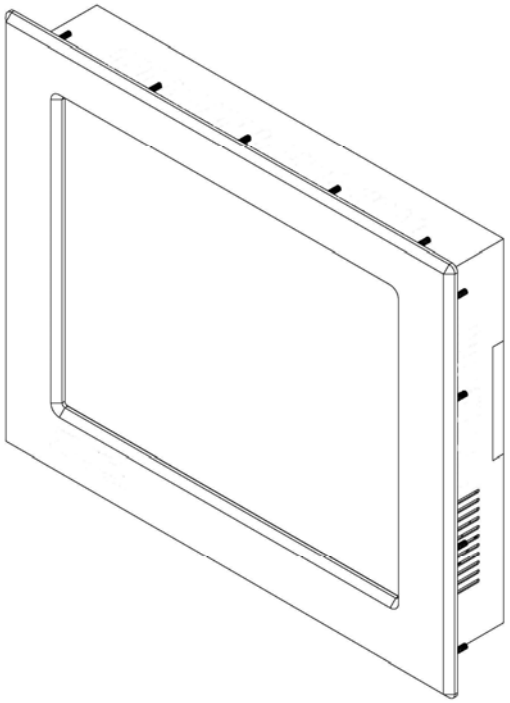


10.4” C1-D2 Compliant Panel Mount PC

Model VTPC100PSS

User’s Guide

Read these instructions completely before attempting to operate your new Panel Mount PC

Revision History

Date	Rev No	Summary	Page
10/12/09	00	First Issue	

Safety Instructions

PLEASE NOTE - This equipment is suitable for use in Class I, Division 2 or non-hazardous locations only.

WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.

AVERTISSEMENT - RISQE D'EXPLOSION - AVANT DE DECONNECTER L'EQUIPMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST DESIGNE NON DANGEREUX.

- Read the Safety Instructions carefully and keep it for use later.
- The chassis metalwork of the module must be installed properly to the main earthing termination for Class 1 equipment.
- Care must be exercised in the application of the system to prevent overheating. Ensure that the ambient temperature around the system does not exceed 60°C and provide adequate means of ventilation to achieve this.
- When cleaning cut off the electrical supply at all times. Never use liquid or aerosol detergent, use a soft damp cloth instead.
- Never insert anything metallic into the chassis openings. This may create an electric shock hazard or hazard from rotating fan blades.
- To avoid electric shock, never touch the inside of the system. There are no user adjustable components inside, only a qualified technician should open the system's case.
- Openings in the system enclosure are to allow for ventilation. To prevent overheating, these openings should not be blocked or covered.
- If the system does not operate normally – in particular, if there are any unusual sounds or smells coming from it – disconnect it immediately.
- Do not put pressure on the LCD panel screen because it is very fragile.
- Always handle the system with care when moving it.
- Take care that the system is disposed of correctly at the end of its life. If in doubt refer to your local ordinances or regulations for proper disposal.
- User to supply appropriate lockable type plug and power disconnecting switch.
- The end user must either supply a switch to their power outlet suitable for Class 1, Division 2 use (if adjacent to the power outlet), or locate the said switch outside the hazardous area.
- This equipment is suitable for use in a Class 1, Division 2, Groups A, B, C, and D or non-hazardous location only.

- Explosion Hazard - Substitution of components may impair suitability for hazardous locations.

- Any Equipment or associated cabling connected to this device must be non-incendive and/or suitable for the Class 1, Division 2 area in which it is to be installed.

Hazardous Locations:

This equipment is suitable only for the locations specified on the product nameplate, specifically:

- Class I, Division 2 Groups A, B, C, D
- Non-hazardous locations

The following statement applies to use in hazardous locations:

WARNING! Explosion Hazard

Substitution of components may impair suitability for hazardous locations.

Do not disconnect equipment unless power has been switched off and area is known to be non-hazardous.

Do not connect or disconnect components unless power has been switched off.

All wiring must comply with N.E.C. articles 501-4(b), 502-4(b), 503-4(b) as appropriate.

Peripheral equipment must be suitable for the location in which it is used.

All hazardous-location equipment must be mounted in an enclosure that is suitably designed or rated for those specific environmental conditions that will be present, and designed to prevent personal injury resulting from accessibility to live parts.

This equipment has an operating temperature code of T4 when operating in a 60`C (140`F) ambient environment. Do not install this product in environments where atmospheric gases have an ignition temperature of less than 135`C (275`F).

Environment and Enclosure Information:

Review this information on enclosures before installing the product:

ATTENTION: Environment and Enclosure

This equipment is intended for use in a Pollution Class 2 industrial environment, in overvoltage Category II applications (as defined in IEC publication 60664-1), at altitudes up to 2000 meters (6561 feet).

This equipment is supplied as open-type equipment. UL recognized and hazardous location equipment must be mounted in an enclosure that is suitably designed or rated for those specific environmental conditions that will be present, and designed to prevent personal injury resulting from accesibility to live parts.

These units are shipped with a gasketed bezel to meet specified NEMA and IEC ratings if and only if mounted in a flat panel or enclosure with an equivalent rating. Peripheral equipment must be suitable for the location in which it is used.

See NEMA Standards publication 250 and IEC publication 60529, as applicable, for explanations of the degrees of protection provided by different types of enclosures. The user may also reference the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1, for additional installation requirements pertaining to this equipment.

Cleaning the LCD monitor

To clean the LCD panel:

- Wipe the screen gently with a clean lens brush made of camel hair, or a soft, clean, lint free cloth. This is to remove dust and other particles without scratching the LCD panel.
- If it is still not clean, then wipe with a damp lint free cloth and blow on it to dry.

Do not clean the panel with a keton-type material (e.g. acetone), or ethyl toluene, ethyl acid, methyl or chloride. These may damage the LCD panel.

Do not apply pressure to the LCD panel.

Standard Technical Specifications:

LCD Monitor:

Size / Type	10.4” SVGA TFT LCD
Native Resolution	800 x 600
Contrast Ratio	500:1
Viewing Angles	Horizontal: 120° Vertical: 100°
Pixel Pitch	0.264mm
Brightness (typical)	230 cd/m²
Response Time (typical)	35ms
Colors Supported	16.8 million

Computer System:

Processor	Intel® Atom™ N270, 1.6 GHz processor
System Memory	200 pin DDR PC-3200 SO-DIMM 2 GB x 1
BIOS	AMI BIOS
Hard Drive	320 GB SATA
Operating System	Microsoft XP Professional (SP3) for Embedded Systems
Expansion Slots	None
Back Panel I/O Ports	PS/2 Keyboard Connector x 1 PS/2 Mouse Connector x 1 Power Inlet x 1 RS-232 Port x 3 (x1 422/485 Optional) USB 2.0 Port x 6 (x4 on Stainless Steel Models) RJ45 LAN Port x 2 VGA Port x 1 IEEE1394a x 2 Audio Jacks: Line Out x 1 / Line In x 1
Graphics	SIS Mirage Graphics Engine
LAN	Realtek RTL8110SC GbE
DVD Drive (E-IDE / ATAPI)	DVD-R, DVD+R, DVD-RW, DVD+RW, DVD-R DL, DVD+R9 CD-R, CD-RW,
Touch Screen	Resistive
Touch Screen Interface	USB

Power & Operational Specifications:

Power Input	100 - 240 VAC 1.5A 50/60 Hz		
	12 - 24 VDC 6.0A max (optional); SELV source required if used		
Power Consumption	37W		
Temperature	Operational:	-32°F to 140°F	0°C to 60°C
	Storage:	-4°F to 149°F	-20°C to 65°C
Humidity	Operational:	20 to 40°C, 90% RH NC	
	Storage:	5 to 65°C, 28% RH NC	

Installation of Your Panel PC

Packaged with each carton will be:

1 - VTPC100PSS
1 - #10-32 Mounting Hardware
1 - Users Guide (Printed or on CD)

BEFORE MAKING ANY CONNECTIONS OR APPLYING POWER,
FIRST READ THROUGH THE ENTIRE MANUAL

Panel Mount Procedure

Panel Mounting Procedure:

1- Cut and drill the panel (refer to the panel mount drawing, Figure A). Measurements are provided in inches and millimeters.

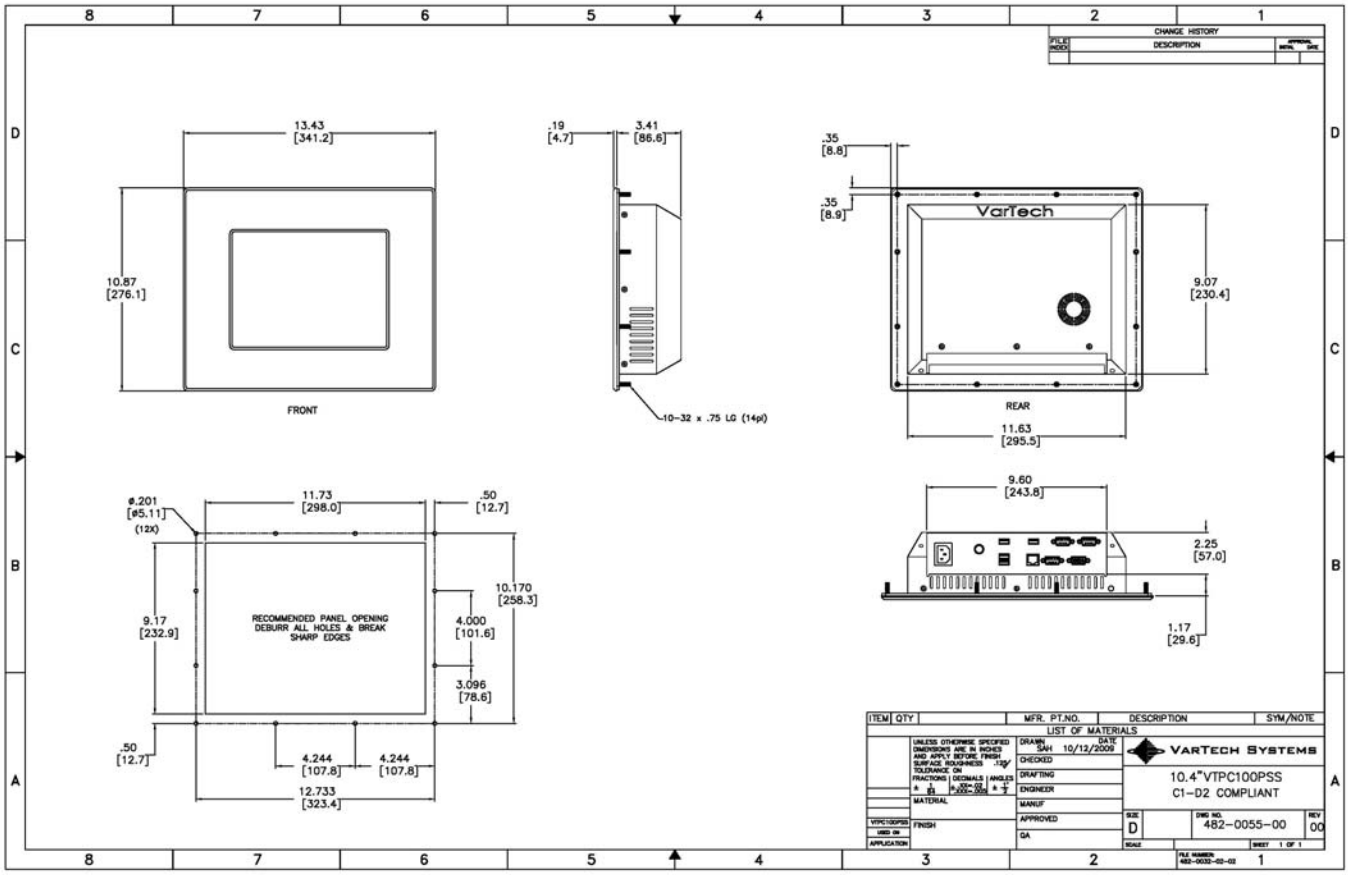
Panel Mounting Cutout:

1- If access to the bottom of the enclosure is not available following installation, attach the power and all necessary cables to the bottom side of the enclosure at this time.
2- Install the enclosure in the prepared cutout.
3- Secure the enclosure using the lock nuts and washers, supplied with the unit, behind the holes running along the sides and the top and bottom of the cutout in the panel. Extra lock nuts and washers are provided.
4- Tighten all mounting hardware to a torque of 24 inch-pounds.

ATTENTION: Mounting nuts must be tightened to a torque of 24 inch-pounds to provide a proper panel seal and avoid potential damage. Vartech Systems assumes no responsibility for water or chemical damage to the monitor or other equipment within the enclosure due to improper installation.

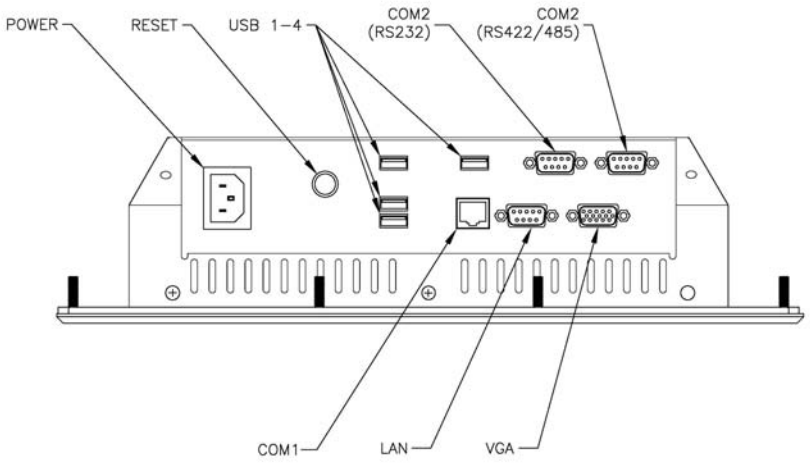
NOTE: An easily accessible 15A fused or breaker protected outlet must be provided for installation of the unit.

5- Attach the power, video and system cables to the bottom side of the enclosure if you have not already done so.



Panel Mount Drawing: Detail –A–

Connections to the Panel Mount PC



Bottom Rear View (AC Unit shown)
- Connector Panel -

PLEASE NOTE – ANY EQUIPMENT OR ASSOCIATED CABLING CONNECTED TO THIS DEVICE MUST BE NON-INCENDIVE AND/OR SUITABLE FOR THE CLASS I DIVISION 2 AREA IN WHICH IT IS TO BE INSTALLED.

Power Connection (Power In)

AC models - The AC model of the Panel Mount PC includes an AC line cord which is 3ft long with stripped wires at the connection end. The user must supply a lockable industrial-type power supply plug to mate with their power outlet. *Also, the end user must either supply a switch to their power outlet suitable for Class I, Division 2 use (if adjacent to the power outlet), or locate the said switch outside the hazardous area.*

DC models - The Panel Mount PC has a lockable DC plug and socket supplied to which the user's DC source must be connected. If the DC source (power brick or otherwise) is plugged into an AC socket within the hazardous area, the end user must supply a lockable industrial-type power supply plug to their power outlet. *Also, the end user must either supply a switch to their power outlet suitable for Class I, Division 2 use (if adjacent to the power outlet), or locate the said switch outside the hazardous area.*

Serial Connections (COM1-2)

The Panel Mount PC is supplied with three serial connectors. COM1 is configured for RS-232; two COM2 ports are provided, one configured as RS-232 and one as RS422/485 (see illustration, above.) The connectors are 9 pin female connectors and can be set up for any baud rate from 300 to 19.2 baud. The connector is located on the bottom panel of the system.

Ethernet Connections (LAN)

The Panel Mount PC is supplied with one integrated Ethernet connector. The interface will support 10/100/1000 BaseT connection to a local area network (LAN). The Panel Mount PC is supplied with two RJ-45 female connectors located on the bottom panel of the system.

USB Connections (USB1-4)

The Panel Mount PC is supplied with four USB 2.0 connectors located on the bottom front panel of the system.

VGA Port

The 15-pin female VGA connector can be used to connect to any analog VGA monitor.

Turning the system On and Off

Before connecting the Panel Mount PC to power, connect any peripheral devices. As a general rule, any peripheral device should only be connected or disconnected when the Panel Mount PC is off with the exception of any USB or 1394 peripheral.

The Panel Mount PC may be turned on using the main On-Off switch which controls the power outlet to which the unit is plugged in. Once the Panel Mount PC is turned on, the computer power reset switch must be depressed for Windows to start. Windows must be properly shut down before the main power switch is turned off to prevent the chance of corrupting files in the operating system.

The Panel Mount PC is rated for continuous duty. However, to extend the life of the various components and conserve power, it is highly recommended that the system be properly shut down and power turned off when the Panel Mount PC is not in use.

LCD Monitor Warm-up Time

All LCD monitors need time to become thermally stable the first time you turn them on. Therefore, to achieve more accurate adjustments for parameters, allow the LCD monitor to warm (be on) for at least 20 minutes before making any screen adjustments.

Maintenance

The Panel Mount PC is designed to provide optimum service and performance with minimal maintenance including the occasional external cleaning. For cleaning the Panel Mount PC enclosure follow the suggested guidelines.

General – NEVER use abrasive cleaners or solvent-based cleaners. Use a clean soft cloth. The Panel Mount PC should only be opened and serviced by a qualified technician. Keep the area around the Panel Mount PC clear and free of excessive dirt or other contaminants. Do not use water or any liquids on the Panel Mount PC.

For Additional Assistance
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